

锦鸡儿属和雀儿豆属新种

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SOME NEW SPECIES OF CARAGANA AND CHESNEYA FROM CHINA

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Key words *Caragana chinghaiensis*; *C. arcuata*; *C. alpina*; *C. cunaroalata*; *C. changduensis*; *C. erenensis*; *Chesneya gansuensis*

关键词 青海锦鸡儿; 弯枝锦鸡儿; 高山锦鸡儿; 楔翼锦鸡儿; 昌都锦鸡儿; 二连锦鸡儿; 甘肃雀儿豆

1. 青海锦鸡儿 新种 图 1: 1a—1g

Caragana chinghaiensis Liou filia, sp. nov. (Ser. Frutescentes)

Frutex 0.5—1 m altus, multo spinosus. Ramuli validi, flavo-brunnei, glabri conspicue virgati; rami veteri viridi-brunnei vel saturate brunnei, candidi, decorticantes. Stipulae lanceolatae, 2—3 mm longae, apice spinoso-mucronatae, deciduae vel persistentes; petioli communes 5—7 mm longi, patentes vel reflexi, indurati, persistentes; foliola 4 pseudo-palmiformia, anguste oblanceolata, 6—10 mm longa, 2—3 mm lata, glabra, apice acuta vel breviter acuminata, spinoso-mucronata, basi cuneata. Pedunculi solitarii, 4—5 mm longi, basi articulati, leviter pubescentes; calyx companulatus basi non dilatatus, c. 6 mm longus, 4 mm latus; corolla flava, 15—20 mm longa; vexillum late obovatum, apice emarginatum; alae oblongae, ungue lamina dimidio brevior, auricula lineari ungui aequilonga; unguis carinae lamina dimidio dilute longiores, auricula obsoleta; ovarium glabrum. Legumen cylindricum, 3—4 cm longum, 3—4 mm crassum.

Qinghai (青海): Xinghai (兴海), Heka (河卡), Hab. in terassa, alt. 2650m, 21 V 1960, Wu Zhen-lan (吴珍兰) 0023 (Typus, LZDI).

A *C. densa* Kom. recedit alarum auricula ungui subaequilonga, vexillo late obovato apice emarginato, foliolis subtus glabris.

本种与密叶锦鸡儿 *C. densa* Kom. 区别在于翼瓣的耳与爪近等长, 旗瓣阔倒卵形, 先端凹入, 小叶背面无毛。

1a. 小青海锦鸡儿 新变种

var. **minima** Liou filia, var. nov.

A var. *chinghaiensi* differt planta c. 20cm alta, foliolis linearibus c. 0.5mm latis, corolla

c. 13mm longa.

Sichuan (四川): Garzê (甘孜) ad Manigenguo (马尼根果), alt. 3600m 29 VI 1965. Zhang Yong-tian (张永田) et Lang Kai-yong (郎楷永) 126 (Typus, PE).

与原变种区别在于植株高约 20 厘米,小叶狭条形,宽约 0.5 毫米。花冠长约 1.3 毫米。

2. 二连锦鸡儿 新种 图 1:2a—2f

Caragana erenensis Liou filia, sp. nov. (Ser. microphyllae)

Frutex c. 40 cm altus. Rami veteres aureolini, candidi; rami juvenales dense albo-sericei. Stipulae apice spinose aciculares, 2—6 mm longae, saepe deciduae; petioli communes dense albo-tomentosi, caduci; foliola 4—6-jugata, late obovata, 5—8 mm longa, 3—5 mm lata, apice rotundata vel truncata, spinose mucronata, utrinque pilis densis cinereo-albis adpressis sericea. Pedunculi solitarii, 1—2 cm longi, supra medium articulati, adpresse sericei. bracteis 2 subulatis; calyx tubulose campanulatus 8—9 mm longus 4—5 mm latus dentibus triangularibus apice acuminatis; corolla aurea, c. 2 cm longa; vexillum subrotundatum, c. 16 mm longum, ungue dimidiam partem laminae aequante; alae vexillo leviter longiores, ungue lamina paulo brevior, auricula acute dentiformi c. 2 mm longa; carinae cum unguibus laminae vix aequantes, obscure auriculatae; ovarium dense cineraceo-sericeum.

Nei Monggol (内蒙古): Xilin Gol Meng (锡林郭勒盟) Erenhot(二连), hab. in pratis 19 VIII 1961, Zhu Ting-cheng (祝廷成) 18 (Typus, PE).

A *C. microphylla* Lam. et *C. intermedia* Kuang et H. C. Fu differt ovario cineraceo-sericeo A *C. korshinskii* Kom. foliolis apice rotundatis vel truncatis, 4—6-jugatis, ovario cineraceo-sericeo, anthesi tardiore distincta.

本种与小叶锦鸡儿 *C. microphylla* Lam. 及中间锦鸡儿 *C. intermedia* Kuang et H. C. hi 区别在于子房及叶密被灰白色绢毛。与柠条锦鸡儿 *C. korshinskii* Kom. 区别在于子房密被灰白色绢毛;小叶 4—6 对,先端圆形或截形,花期较晚。

3. 弯枝锦鸡儿 新种 图 1:3a—3f

Caragana arcuata Liou filia, sp. nov. (Ser. Tragacanthoides)

Frutex c. 80 cm altus. Rami veteres brunnei; rami elongati hornotini flavo-brunnei, virgati; rami abbreviati arcuati. Stipulae in ramo elongato in spinas indurescentes, 1—3 mm longae, eae in ramo abbreviato delapsae, basibus persistentibus congestis; petioli communes juventute pubescentes, in ramis elongatis in spinas indurescentes, 1.5—2 cm longi, in ramis abbreviatis caduci; foliola 3—5-juga, obovato-oblonga vel obovata, 6—9 mm longa, 2—4 mm lata, utrinque adpresse sparse pilosa, apice obtuso-rotundata, spinis instructa, basi cuneata. Pedunculi solitarii, 3—5 mm longi, basi articulati, adpresse pilosi; calyx campanulato-tubularis, 7—8 mm longus, extus adpresse pubescens, basi non dilatatus, dentibus albo-ciliatis; corolla flava, vexillo 18—19 mm longo, late ovato vel subrotundo apice rotundato vel paulo concavo, ungue laminae 1/3 aequante, alis suboblongis, ungue laminae 1/3 aequante, auriculis rotundato-obtusis, ungue carinae lamina leviter brevior; ovarium glabrum.

Xinjiang (新疆): Gongliu (巩留) Mohequ (莫合区), Kebujuge (可不基盖), in montibus apricis, alt. 929m, 5 V 1959, Exped. Xinjiang.Acad. Sin. (新疆考察队) 10305 (Typus, PE).

A *C. acanthophylla* Kom. differt pedunculo brevi, calyce basi non dilatato, ramis abbrevi-



图1 1a—1g. 青海锦鸡儿 *Caragana chinghaiensis* Liou filia; 2a—2f. 二连锦鸡儿 *C. erenensis* Liou filia; 3a—3f. 弯枝锦鸡儿 *C. arcuata* Liou filia. a. 花枝 flower branch; b. 旗瓣 standard; c. 翼瓣 wing; d. 龙骨瓣 keel; e. 雌蕊 pistil; f. 花萼 calyx; g. 雄蕊 stamens. (蒋兆兰绘)

atis flexuosis, stipulis persistentibus confertis.

本种与刺叶锦鸡儿 *C. acanthophylla* Kom. 区别在于花梗较短, 萼基部不扩大, 短枝弯曲, 托叶残留密集短枝上。

4. 昌都锦鸡儿 新种 图 2:1 a—1f

Caragana changduensis Liou filia, sp. nov. (Ser. Acanthophyllae)

Frutex 1.2—2 m altus. Rami veteri flavo-brunnei vel cinereo-brunnei, decorticati; rami abbreviati conferti. Stipulae rubro-brunneae, coriaceae, dense villosae; petioli communes tenues, 2—3 (6.5) cm longi, persistentes, in rami abbreviatis constipati puberuli; foliola 5—7-jugata, ovato-oblonga vel oblonga, 5—7 mm longa, 2.5 mm lata, apice breviter acuta, spinose mucronata, utrinque puberula, subtus pubibus densioribus, viridula. Pedunculi solitarii, 2—3 mm longi, basi articulati; calyx tubulosus, 7—10 mm longus, c. 5 mm latus, saepe rubro-brunneus, puberulus; corolla flava, 22—23 mm longa; vexillum late obovatum, apice leviter rotundatum, basi in unguem angustatum; alae cum ungue dimidiam partem laminae oblongae superante vel ea leviter brevior, auricula c. 1 mm longa dentiformi; carinae apice cutae, ungue laminae basi subtruncata longiore, obscure auriculatae; ovarium tomentosum. Legumen lanceolatum, bilateraliter compressum, c. 2.5 cm longum, 5 mm latum, apice mucronatum, extus albo-puberulum, intus glabrum.

Xizang (西藏) Qumdo (昌都) ad Baxoi (八宿) hab. in pratis montanis, alt. 4200m, 6 VI 1973, Exped. Comp. Qinghai-Xizang. (青海西藏考察队) 73—85 (Typus, PE).

A *C. jubata* (Pall.) Poir. differt foliolis corollaque brevioribus, corolla flava, auricula alae minore. A *C. nepalensi* Kitamura alis breviter auriculatis, pedunculo brevi, legumine tomentoso dignoscenda. A *C. sukiensis* C. K. Schn. recedit auricula alae brevi et parva, calyce brevi. A *C. gerardiana* Royle legumine intus glabro, foliolis 5—7-jugatis distincta.

本种与鬼箭锦鸡儿 *C. jubata* (Pall.) Poir. 区别在于小叶及花冠均较短, 花冠黄色, 翼瓣耳短小。与尼泊尔锦鸡儿 *C. nepalensis* Kitamura 区别在于翼瓣耳短, 花梗短, 果有毛。与锡金锦鸡儿 *C. sukiensis* C. K. Schn. 区别在于翼瓣耳及萼均较短小。与印度锦鸡儿 *C. gerardiana* Royle 区别在于荚果里面无毛, 小叶 5—7 对。

5. 楔翼锦鸡儿 新种 图 2:2a—2f

Caragana cuneato-alata Liou filia, sp. nov. (Ser. Jubatae)

Frutex 1.2—2 m altus. Rami veteres pallide brunneoli; rami annui dense albo-villosi. Stipulae rubido-brunneae, coriaceae, apice breviter acuminatae inermes, dense albo-villosae. Petioli communes 2.5—3.5 cm longi, indurati, persistentes, juventute albo-villosi; foliola 3—4-jugata, oblonga, utrinque leviter acuta, supra obsoure viridia, subtus viridula, utrinque villosa, vix sessilia. Flores solitarii, brevissime pedicellares; calyx tubiformi-campanulatus, 1 cm longus, dentibus triangulis spinoso-mucronatis, extus pilosus; corolla 27—28 mm longa; vexillum oblongum; alae anguste cuneatae, exauriculatae, ungue laminae dimidiam partem fere aequante, auricula ungue proxima; carinae cum ungue lamina leviter longiore; ovarium dense puberulum.

Xizang (西藏): Lhünzê (隆子), hab. in montibus et valle rivuli, alt. 4700m, 20 VIII 1960, Zhang Jing-wei (张经纬) et Fu Guo-xun (傅国勋) 01147 (Typus, PE).

A *C. jubata* (Pall.) Poir. differt vexillo ovato, alis cuneatis, auricula ungue proxima, foliolis 3(4)-jugatis.

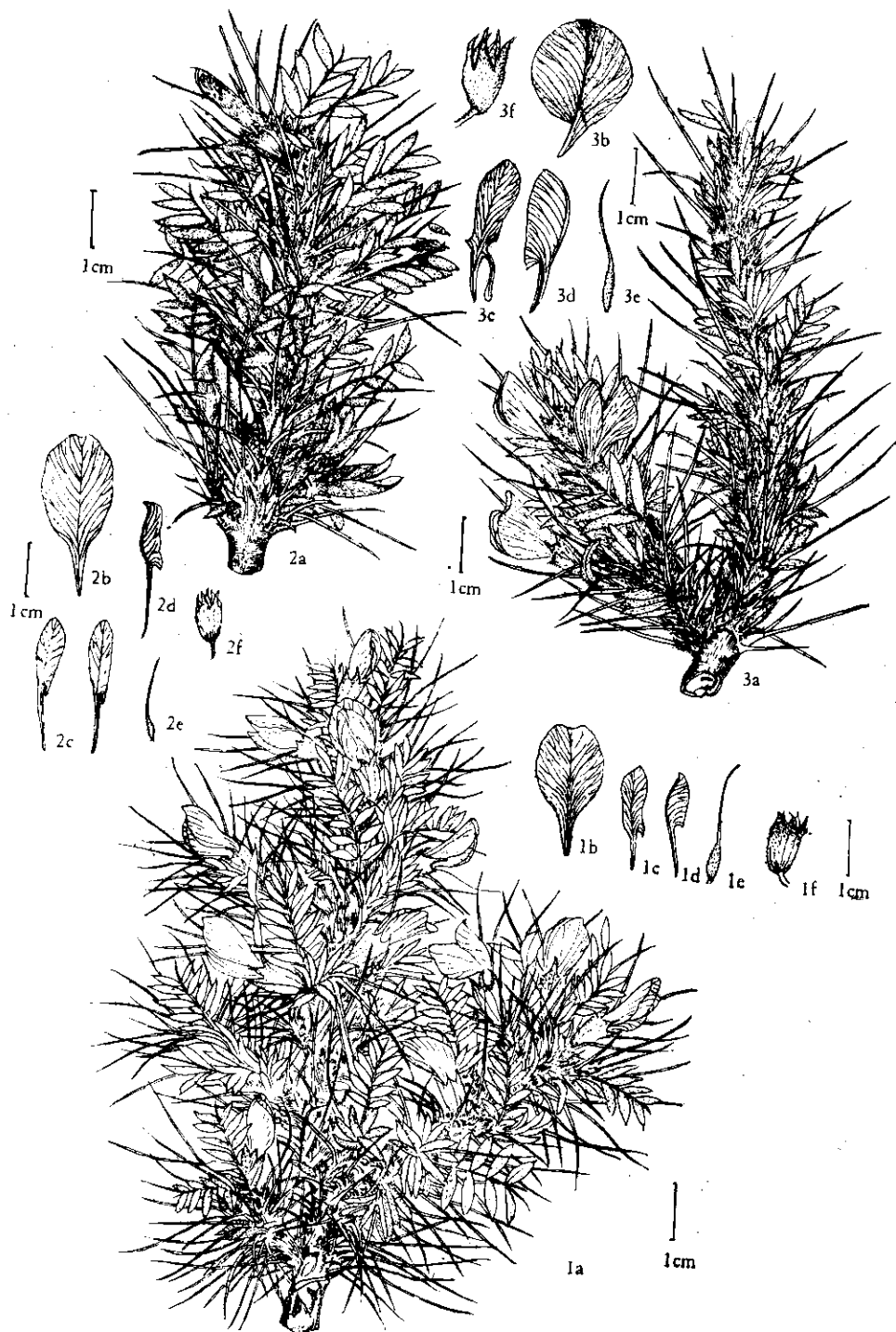


图 2 1a—1f. 昌都锦鸡儿 *Caragana changduensis* Liou filia; 2a—2f. 楔翼锦鸡儿 *C. cuneato-alata* Liou filia; 3a—3f. 高山锦鸡儿 *C. alpina* Liou filia. a. 花枝(或果枝) flower branch (or fruit branch)
b. 旗瓣 standard; c. 翼瓣 wing; d. 龙骨瓣 keel; e. 雌蕊 pistil; f. 花萼 calyx. (蒋兆兰绘)

本种与鬼箭锦鸡儿区别在于旗瓣卵形,翼瓣的耳靠近爪,呈楔形,小叶 3(4) 对。

6. 高山锦鸡儿 新种 图 2:3a—3f

Caragana alpina Liou filia, sp. nov. (Ser. jubatae)

Frutex 1—1.5 m altus. Rami veteri fusi vel flavobrunnei; rami horotini validi, dense cinereo-villosi. Stipulae coriaceae, dense villosae, apice spinis plerumque caducis. Petioli communes 2.5—5 cm longi, conferti, persistentes, juventute dense cinereo-villosi, vetustate rubiginosi; foliola 3-jugata, inter se remota, linearia, 12—16 mm longa, 2—3 mm lata, apice acuta, spinoso-mucronata, basi paulo rotundato-obtusae, utrinque cinereo-villosae, subtus densius, saepe ex nervo medio sursum superimpositae. Pedunculi solitarii, 3—4 mm longi, basi articulati, villosi; calyx campanulato-tubulosus, 8 mm longus, dentibus lanceolatis tubo calycis aequilongis vel longioribus, 8—10 mm longis, dense villosis; corolla flavo-alba, 24—25 mm longa, vexillo dorso roseolo, lamina subrotundata utrique villosa, extus in medio dense villosa, ungue laminae 1/2 aequante, alis superne latioribus, unguibus laminae c. 2/5 aequantibus, auriculis duabus unguibus paulo longioribus, auricula superiore triangulari dentiformi, carinis alis paulo latioribus basi oblique truncatis, ungue lamina brevior, obscure auriculatis; ovarium dense villosum.

Xizang (西藏): Nagarzê (郎卡子), Kayeladong (卡惹拉东), hab. in montanis saxosis, alt. 4750m, 3VI 1975, Exped. Comp. Qinghai-Xizang (青藏综合考察队) 6425 (Typus, PE).

A. C. jubata (Pall.) Poir. differt vexillo villosa, alis 2-auriculatis, foliolis 3-jugatis.

本种与鬼箭锦鸡儿区别在于旗瓣有毛,翼瓣具 2 耳,小叶 3 对。

7. 双耳鬼箭 新变种

Caragana jubata (Pall.) Poir. var. **biaurita** Liou filia, var. nov.

A. var. jubata (Pall.) Poir. recedit alis 2-auriculatis, auricula superiore lineari, 2—6 mm longa; *A. C. jubata* (Pall.) Poir. var. *czetyrkini* (Sancz.) Liou filia differt foliolis 5—7 mm latis, calyce 14—15 mm longo, corolla 36—39 mm longa.

Hebei (河北): Zhuolu (涿鹿), 5VI 1953, Yang Chao-guang (杨朝广) 1710 (Typus, PE).

与原变种区别在于翼瓣具 2 耳,副耳条形,长 2—6 毫米。与浪蕨鬼箭区别在于小叶宽 5—7 毫米;萼长 14—15 毫米,花冠长 36—39 毫米。

8. 弯耳鬼箭 新变种

Caragana jubata (Pall.) Poir. var. **recurva** Liou filia, var. nov.

A. var. jubata recedit alae auricula ungui insidente, corolla purpurea c. 2.5 cm longa. *A. C. jubata* (Pall.) Poir. var. *biaurita* Liou filia et *C. jubata* (Pall.) Poir. var. *czetyrkini* (Sancz.) Liou filia differt alis 1-auriculatis, calycis tubo 7—8 mm longo.

Gansu (甘肃): Maxian Shan (马啣山), 26 VI 1980, Liou Ying-hsin (刘英心) et Yang Hsi-ling (杨喜林) 8056 (Typus, LZDI).

与原变种区别在于翼瓣的耳生于爪上,花冠长约 2.5 厘米,紫红色。与双耳鬼箭和浪蕨鬼箭区别在于翼瓣只有 1 耳;萼筒长 7—8 毫米。

9. 甘肃雀儿豆 新种 图 3

***Chesneya gansuensis* Liou filia sp. nov. (Sect. *Macrocarpa*)**

Herba perennis dense pubescens, cinereo-viridis. Caules ad rhizomatem lignosum conferti, 3—8 cm longi, prostrati vel decumbentes. Folia imparipinnata, 1—2.5 cm longa; stipula lanceolata vel ovata, apice acuta vel obtusa; foliola saepe 9, obtriangulata vel triangule obovata, 0.5—1 cm longa, 3—6 mm lata, apice truncata raro rotundata, purpureo-nigro-cuspidata, basi cunneata, utrinque pubescentia, petiolulo brevissimo suffulata. Flores rubri, singulares, e foliorum axillis orti, pedicello 8—18 mm longo superne minime bracteato; calyx campanulatus, leviter obliquus, 2—3 mm longus, dentibus lanceolatis superioribus duobus fere connatis calicis tubo duplo longioribus; vexillum subrotundatum, 12—13 mm longum, ungue vix 1 mm longo, apice emarginatum, dorso pilis adpressis divaricato-furcatis tectum, farinosis; alae oblongae, vexillo aequilongae, ungue c. 1 mm longo, auricula brevi obtusa; carinae vexillo paulo breviores, ungue vix 1 mm longo. Legumen oblongum, compressum albo-pubescent.

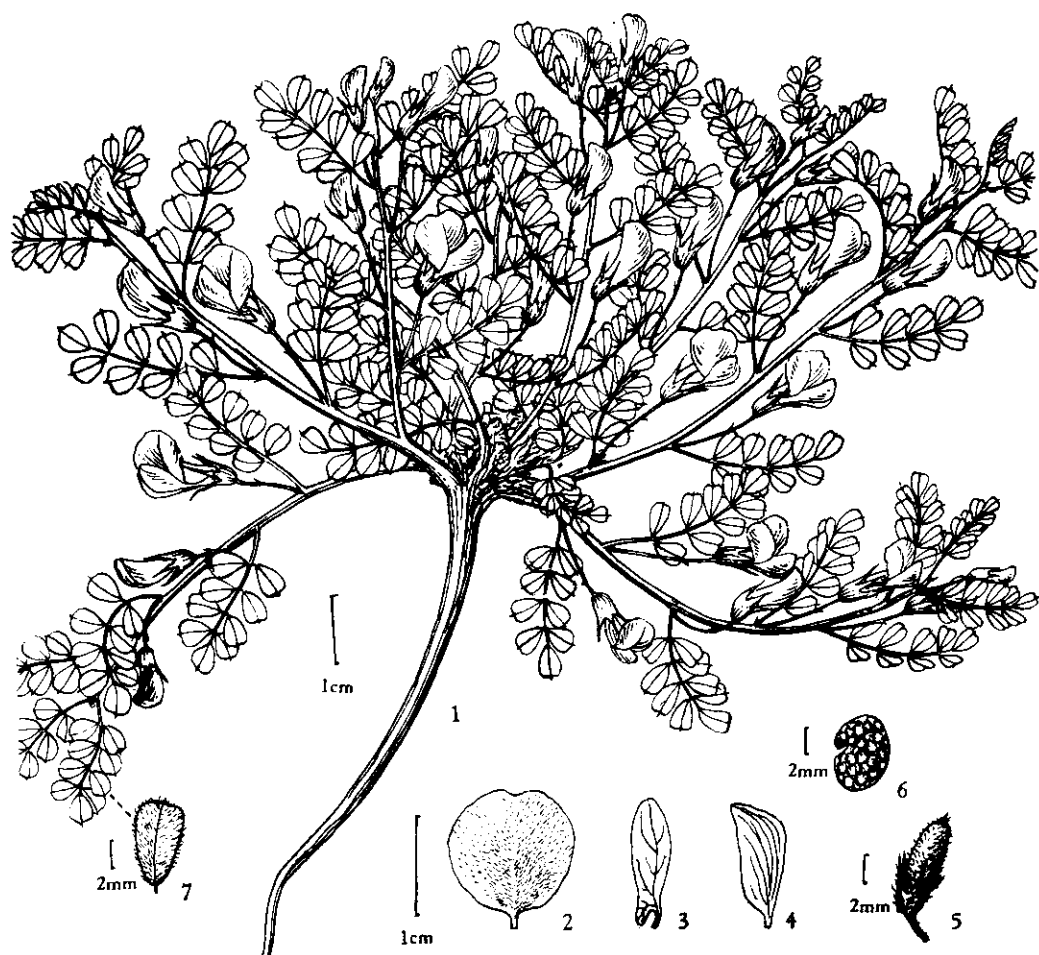


图3 甘肃雀儿豆 *Chesneya gansuensis* Liou filia 1. 植株 plant; 2. 旗瓣 standard; 3. 翼瓣 wing; 4. 龙骨瓣 keel; 5. 果 fruit; 6. 种子 seed; 7. 叶 leaf. (陶明琴绘)

Gansu (甘肃): Linze (临泽), Pingchuangongshe (平川公社), Beishanluquan (北山、芦泉), hab. in locis aridorum humilium montium et collium, Yang Hsi-ling (杨喜林) 016

(Typus, LZDI).

Haec species *Chesneyae ferganensi* Korsh. Proxima, sed quae foliolois 5—7, raro 9, vexilli, alarum et carinarum unguibus longioribus (2—3mm longis) differt.

多年生草本,密被柔毛,呈灰绿色。茎丛生于短缩的木质化根茎上,长3—8厘米,平卧或外倾。托叶披针形或卵形,先端锐尖或钝;奇数羽状复叶长1—2.5厘米;小叶常为9片,倒三角形或三角状倒卵形,长0.5—1厘米,宽3—6毫米,先端平截,稀圆形,具紫黑色刺尖,基部楔形,两面被柔毛,上面毛稀疏,小叶柄极短。花红色,单生于叶腋,花梗长8—18毫米,上部具小苞;萼钟形,筒长2—3毫米,稍偏斜,齿披针形,上部2齿近结合,齿长为筒的2倍;旗瓣近圆形,长12—13毫米,爪长近1毫米,先端凹入,背部伏生丁字毛和鳞粉;翼瓣矩圆形,与旗瓣近等长,爪长约1毫米,具短钝耳;龙骨瓣稍短于旗瓣,爪长不及1毫米。荚果矩圆形,扁,被白色长柔毛。花期5月。

本种与费尔干雀儿 *C. ferganensis* Korsh. 豆接近,但后者小叶为5—7片,稀9片;旗瓣、翼瓣和龙骨瓣的爪均较长,长2—3毫米。